

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,116	03/02/2004	Ronald S. Cok	87954AJA	2666
7590 05/03/2006			EXAMINER	
Paul A. Leipold			DUDA, KATHLEEN	
Patent Legal Staff Eastman Kodak Company			ART UNIT	PAPER NUMBER
343 State Street			1756	
Rochester, NY 14650-2201			DATE MAILED: 05/03/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summary	10/791,116	COK, RONALD S.				
Onice Action Summary	Examiner	Art Unit				
	Kathleen Duda	1756				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period value of the period for reply within the set or extended period for reply will, by statute any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 06 Fe	ebruary 2006.					
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This						
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-30</u> is/are pending in the application.						
	4a) Of the above claim(s) <u>26-30</u> is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-25</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	ır.					
10) The drawing(s) filed on is/are: a) acce	epted or b)⊡ objected to by the	Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
<ul><li>12) Acknowledgment is made of a claim for foreign</li><li>a) All b) Some * c) None of:</li></ul>	priority under 35 U.S.C. § 119(a)	)-(d) or (f).				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents	s have been received in Applicati	on No				
<ol><li>Copies of the certified copies of the prior</li></ol>	rity documents have been receive	ed in this National Stage				
application from the International Bureau	` · · ·					
* See the attached detailed Office action for a list	of the certified copies not receive	ed.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> </ul>	Paper No(s)/Mail Da 5) Notice of Informal P	ate atent Application (PTO-152)				
Paper No(s)/Mail Date	6) Other:					

Application/Control Number: 10/791,116 Page 2

Art Unit: 1756

#### **DETAILED ACTION**

## **Election/Restrictions**

1. Claims 26-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/9/05.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1-25 are rejected under 35 U.S.C. 102(e) as being anticipated by French (US 6,946,410)

A population of nanostructures are admixed within the dispersant layer and positioned on a substrate. Resist (protective radiation curable layer) is applied and exposed to radiation through a mask and developed. A cutting

Application/Control Number: 10/791,116

Art Unit: 1756

means, such as irradiation with ions, plasma or electrons, is used to form the conductive pattern (col.9. 4-61). Nanostructures may be defined as in col.7, 14-33 and includes tubes, rods and carbon nanotubes. The photoresist is exposed to radiation such as UV light (col.7, 34-67). The nanotubes are aligned or orientated in the dispersant solution (col.8, 59-64). The nanotubes may be continuously cut using a system that will allow for the movement of the solid substrate through baths of various components by attaching the solid substrate to an endless conveyor means such as a belt. The dispersant solution could be dried after coating, in addition to baking (curing) the resist (col.10, 52-67). The dispersion and resist bath dips may be repeated to build up multiple layers. The examples teach exposing the resist through a photomask, or using a stepper rastering back and forth. See specifically Example 4 and 13. The nanotubes may be used in a variety of application including panel displays (col.1, 38-47).

Page 3

Applicant argues that the result of French appears to be very short sections which would decrease electrical conductivity and that a particular end-use device is obtained. Column 1, lines 15-23, teach that the process of French is useful in electronic devices including microelectronic circuitry. Column 1, line 40, teaches panel displays. These devices rely on electrical conductivity so the structures will be sufficiently electrically conductive.

Application/Control Number: 10/791,116 Page 4

Art Unit: 1756

### Conclusion

**4. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication should be directed to Examiner K. Duda at (571) 272-1383. Official FAX communications should be sent to (571) 273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff, can be reached at 571-272-1385.

Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public

Application/Control Number: 10/791,116 Page 5

Art Unit: 1756

PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kathleen Duda Primary Examiner Art Unit 1756